# Translation





# **PCT**

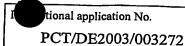
# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference					
2002P16561WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)				
International application No. PCT/DE2003/003272	International filing date (day/month/year) Priority date (day/month/year)  01 October 2003 (01.10.2003) Priority date (day/month/year)  13 November 2002 (13.11.2002)				
International Patent Classification (IPC) or national classification and IPC F02M 25/08					
Applicant					
I	EMENS AKTIENGESELLSCHAFT				
This international preliminary examinated to the approximation.	ination report has been prepared by this International Preliminary Examining plicant according to Article 36.				
2. This REPORT consists of a total of _	5 sheets, including this cover sheet.				
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).					
These annexes consist of a total					
<ol> <li>This report contains indications relating</li> </ol>	g to the following items:				
I Basis of the report					
II Priority					
III Non-establishment of	opinion with regard to novelty, inventive step and industrial applicability				
IV Lack of unity of inven					
V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;					
VI Certain documents cite	ed				
VII Certain defects in the international application					
VIII Certain observations on the international application					
Date of submission of the demand					
22 April 2004 (22.04.2004	Date of completion of this report  03 February 2005 (03.02.2005)				
Name and mailing address of the IPEA/EP	Authorized officer				
acsimile No.	Telephone No.				
70					

Form PCT/IPEA/409 (cover sheet) (January 1994)

# INTERNATIONAL PRESIMINARY EXAMINATION REPORT



I. Basis of the report			
1. This report has been drawnder Article 14 are referre	wn on the basis of (Repla	cement sheets which have been furnished	to the receiving Office in response to an invitation report since they do not contain amendments.):
		and the minute is the	e report since they do not contain amendments.):
	onal application as origin		
the description	on, pages	, as originally filed,	
	pages1, 4	12 , filed with the demand,	
	pages2, 2a,	3, 3a , filed with the letter of	22 December 2004 (22.12.2004)
	pages	, filed with the letter of	
the claims,		, as originally filed,	
		, as amended under Artic	de 10
		, filed with the demand,	
	Nos1-8	filed with the letter of	22 December 2004 (22.12.2004)
	Nos	filed with the letter of	22 December 2004 (22.12.2004)
the drawings,			
Life drawings,		2/2 , as originally filed,	
		, filed with the demand,	
	sheets/fig	, filed with the letter of	,
	sneets/ng	, filed with the letter of	
ne amendments have resu	ted in the cancellation o	£:	
the description,	pages		
the claims,			
the drawings,	sheets/fig		
This report has been e	stablished as if (some of	) the amendments had not been made	Since they have been and the
to go ocyona me disci	osure as filed, as indicat	) the amendments had not been made ed in the Supplemental Box (Rule 70	2.2(c)).
ditional observations, if n	ecessarv		
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rnational	application No.
T/DE	03/03272

V.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	supporting such statement

			of industrial applicabil	ity;
1.	Statement			
	Novelty (N)	Claims	1-8	YES
		Claims		NO
	Inventive step (IS)	Claims	1-8	YES
		Claims		NO
	Industrial applicability (IA)	Claims	1-8	YES
		Claims		NO NO
2.	Citations and explanations			=

2. Citations and explanations

Reference is made to the following document:

D1: US-A-5216991.

### Claim 1:

Document D1 discloses a method for controlling a regeneration valve of an evaporative emission control system of an internal combustion engine, wherein the regeneration valve (23) is controlled by a control signal (duty P  $\cdot i \cdot$ ), wherein the control signal corresponds to a particular valve position, and wherein the relationship between the control signal and the resulting position of the regeneration valve is determined using a calibration process.

To this end, in document D1 the valve is actuated by different values of the control signal and on the basis of the load reduction by ignition retard required for compensation it is determined whether the valve is open or closed. The control signal PO, which opens the valve, is stored for the calibration of the characteristic curve according to figure 15 or figure 16.

The subject matter of claim 1 therefore differs from a method according to document D1 in that the valve position corresponding to different control signal values is derived from the load reduction by ignition retard, and the individual values of the control signal and the resulting valve position are stored as interpolation points of a characteristic curve.

If the interpolation points for several valve positions are determined the characteristic curve can be calibrated more precisely. This solution is not suggested by document D1 since document D1 does not determine the actual valve position from the load reduction by ignition retard but merely determines whether the valve has opened. The remainder of the prior art citations likewise offer nothing to suggest the calibration of the entire characteristic curve by the determination of a plurality of interpolation points.

Consequently, claim 1 is novel and inventive within the meaning of PCT Article 33(2) and (3).

## Dependent claims:

Dependent claims 2-8 are dependent on claim 1 and therefore likewise meet the PCT requirements for novelty and inventive step.

## Clarity

The use of the expression "in particular" in claim 1 results in lack of clarity within the meaning of PCT Article 6. Although anyone working in the field of patents knows that such expressions should not be considered to



have a restrictive effect, the same cannot be said of the general public. It should further be noted that the claims might be translated and that there is no guarantee that the lack of clarity might not result in a mistake in the translation.